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ABSTRACT

With the dramatic increase in minorities in certain parts of the United States and expected continued increases in the populations of these minorities, the need for radio communications directed at such communities is apparent. Twenty-thousand or more low-output radio stations could air programming on that portion of the FM radio band which the Federal Communications Commission (FCC) sets aside for noncommercial broadcasting. Funding would be the key concern for any new minority broadcasting operations, although some state and federal funding is available. Generally speaking, minority members tend to be in the lower income strata and generally cannot afford to finance a local noncommerical station. Ironically, these are the people that most need the radio stations to be made available for them. A 10-watt noncommercial station could cover about five miles in diameter. Such an output is enough to enable anyone within the area to pick up the signal with an FM receiver and to prevent other signals from penetrating the area. (Two figures are included.) (SG)

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Two-Thousand Stations on Twenty Channels or A Partial Way to Solve Minority Programming

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ABSTRACT

Two-Thousand Stations on Twenty
Channels or A Partial Way to Solve
Minority Programming

With the dramatic increase of minorities in certain parts of the United States, and the expected continued increase of these minorities, the need for directed intangible radio communications is apparent.

The low amount of minority programming, and in some cases the total lack of directed minority communications is of concern. America is a conglomeration of many diverse races and minority groups. And as such, these groups deserve to have some kind of communications directed to them in their respective communities.

This paper attempts to review the engineering possibility of establishing no less than 2,000 FM radio stations across the United States in minority communities, on the 20 band non-commercial frequency channels that the Federal Communications Commission established decades ago.

The paper reviews the cultural consideration for having directed radio programming for minorities. The radio engineering concerns are reviewed and discussed. The flexibility of radio along with the cultural considerations for broadcasting are discussed.

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Over the past four or five years, I have become more aware of a problem that I had not really given much thought to. That is, the lack of minority programming in the broadcast industry, and in many cases, zero programming.

The United States (I am not ignoring Canada, but I do address the minority issue in Canada for this paper) is a conglomeration of many diverse people, made up of hundreds cultures, numerous creeds, and many races. If your heritage is not that of the main stream folks chances are, you will be slighted. Everyone deserves to have a broadcast medium directed toward them to serve their needs and desires. I believe radio will cover the needs and wants better than any other form of communications. I am ruling out the television medium, as the costs for start-up and continuous programming are prohibitive. In the future when the low wattage (500) television station allocations are approved by the Federal Communication Commission, the idea may then have some merit, but not now.

The citations on the following pages follow the style of the Journal of Educational Psychology.

I am advocating the use of educational (also known as non-commercial) radio and more specifically frequency modulation (FM) educational radio. The FM radio station can be a low cost, high effect reality. Presently, the FM radio output in the United States leads all other forms of broadcast output. About two years ago FM surpassed amplitude modulation (AM) radio as the leader. Since 1970, FM radio has taken one giant step forward for mankind. There are literally hundreds of non-commercial FM radio stations "on air" across the country right now, and they operate on a mere twenty channels (Figure 1). Twenty channels of allocation does not seem like much when you consider the whole broadcast spectrum, but in reality it is, and can technically accomodate thousands upon thousands of additional radio station allocations.

The Federal Communications Commission can from a technical point, place over twenty-thousand radio stations on those twenty channels. As-a-matter-of-fact, the computers indicate that many thousand more can be added to the twenty thousand. Of course, this can only be done if the station wattage is kept at the low output level, of say ten watts. Admittedly, ten watts of radiated output is not much and the coverage area is not that great, but it can cover certain dense areas of population. It must also be noted that the allocations must be staggered so that a minmum of adjacent interference would occur.

In order to allow the non-commercial ownership to expand the FCC must encourage and start to allocate the channels.

FIGURE 1

Radio Educational Channels
in the United States

Channel Number	Frequency Number
201	88.1
202	88.3
203	88.5
204	88.7
205	88.9
206	89.1
207	89.3
208	89.5
209	89.7
210	89.9
211	90.1
212	90.3
213	90.5
214	90.7
215	90.9
216	91.1
217	91.3
218	91.5
219	91.7
220	91.9

The FCC tends to be a little emiguous when it comes to the laws about who may and may not own and operete non-commercial radio stations. In a way, that is good. The owners and operators of the non-commercial FM stations must stay within certain frameworks that the FCC sets down, but they really are more flexible than are the commercial stations. Now, non-commercial stations may literally advertise on their stations, and so they now can compete with the commercial operators. As the laws presently read, any person or group of people who have a legitimate reason for wanting to establish an educational non-commercial FM radio station have the right to make application for an educational non-commercial FM station. As of today, almost 100 percent of all non-commercial FM radio stations are either owned and operated by schools or religious affiliated organizations. There are very few minority owned non-commercial radio stations. The non-commercial aspect is the thing that probably stops the ownership. The profit motive rules the market place.

When I mention the words "educational FM radio," the first thing most people think of is instructional programming. That is not what educational programming is, it really ought to be called "public radio, and in many areas of the U.S. it is, but not all. The term is borrowed from "public television," by which the Carnegie Commission on Educational Television in 1966 meant non-commercial educational television programming directed at the general community, as distinguished from "instructional television" (National Education Radio, 1973, p.109).

When the National Public Radio was established from the Public Broadcasting Act of 1967, it gave local communities the right to establish their own non-commercial FM radio stations. My proposal will allow for this Act to be fully utilized.

Many non-commercial FM stations did not plan their programs for the listeners, but instead programmed from what they could get or what was readily available. Some to a lesser degree still do. However, in the past few years there has been a change in many radio broadcasters attitudes and they are starting to program for their respective communities. But not all are that interested. Back in the early 1970s, Robertson and Yokom found that many non-commercial FM stations would broadcast some sort of daily programming for minorities who faced real difficulties in knowing where to go for assistance of various kinds(NER, 111 112).

It is well documented that the local non-commercial FM station become more personally involved with local programming than do many of the local commercial AM or FM stations.

Funding will be the <u>key</u> concern for the establishment of non-commercial FM stations. This is a very real thing when we speak of minority non-commercial owned or directed FM radio stations. Generally speaking, minority members tend to be in the lower strata in income, and generally cannot afford to finance a local non-commercial station.

Ironically, these groups of people are the very people that need to have those radio stations made available for them.

Many non-commercial stations are funded by community fund raising drives, personal donations and listener support. A number of states have also decided to add revenue to the local non-commercial outlets. The State of Minnesota has for the past twenty years served as the guiding light, and has taken a leadership role in supporting the medium. Minnesota established a state-wide radio network which is financed by foundation grants, special contracts, and also citizen support. The Network does extensive broadcasting for the Indians and other minority groups in the State. It is working rather well in Minnesota, why not the nation?

There are many minorities that live in an island type environment. On Chicago's northside there is a community of four-thousand Cubans that live in an area that is surrounded by blue collar whites. These Cubans have no broadcast medium that is directed to them. They live off another culture. It is no wonder they feel neglected. In south Texas, the boat people from Vietnam live in an area that is totally surrounded by whites and other minority groups. The boat people also feel unwanted and not understood. These two examples are not rare in the United States society. The communication process can work, and again I say part of this problem can be corrected.

The solution to the United States problem of minority programming may not be that difficult of a task. Granted it is not television, it is radio, yet I do believe that minority

groups would welcome a specific medium directed to them. As I mentioned earlier, a vast number of FM radio stations could be allocated to the twenty channels that are allocated for educational use (community radio included). We must remember that the wattage must be kept low and the frequency separated in a correct manner.

A ten watt, non-commercial station will cover about five miles in diameter, or about two and a half miles from the transmission tower. If the transmitter was centered in the desired broadcast area, just about everyone would be able to pickup the signal, provided they had a FM receiver. Also, the ten watt power output would be strong enough to block out any other signal that may be trying to penetrate the area. The Cubans of Chicago would then have radio that features their culture. (Figure 2)

The initial start-up cost for a local non-commercial FM radio station could actually be very low. The largest cost would be the transmitter. The other costs would vary. The operations of the station would depend on what the organization wants the format to be like. The announcers can either be volunteers or professionals. It would all depend on the community involvement.

In conclusion, I feel that the radio medium is very poorly used at the non-commercial allocation level. But, with a little effort and not a great deal of financial outlay many radio stations could be constructed and become better utilized, especially for the many minority groups

that are in the United States.

The Federal Communications Commission admits that well over twenty thousand stations could be placed on the twenty channels, if the wattage is kept low. State and Federal grants are available for such projects, and with the ever growing increase in minority communities a real need for the community non-commercial FM radio stations exists.

Radio stations, no matter what kind they are, non-commercial or commercial are very flexible, and they can serve the needs of their respective communities as those needs arise.

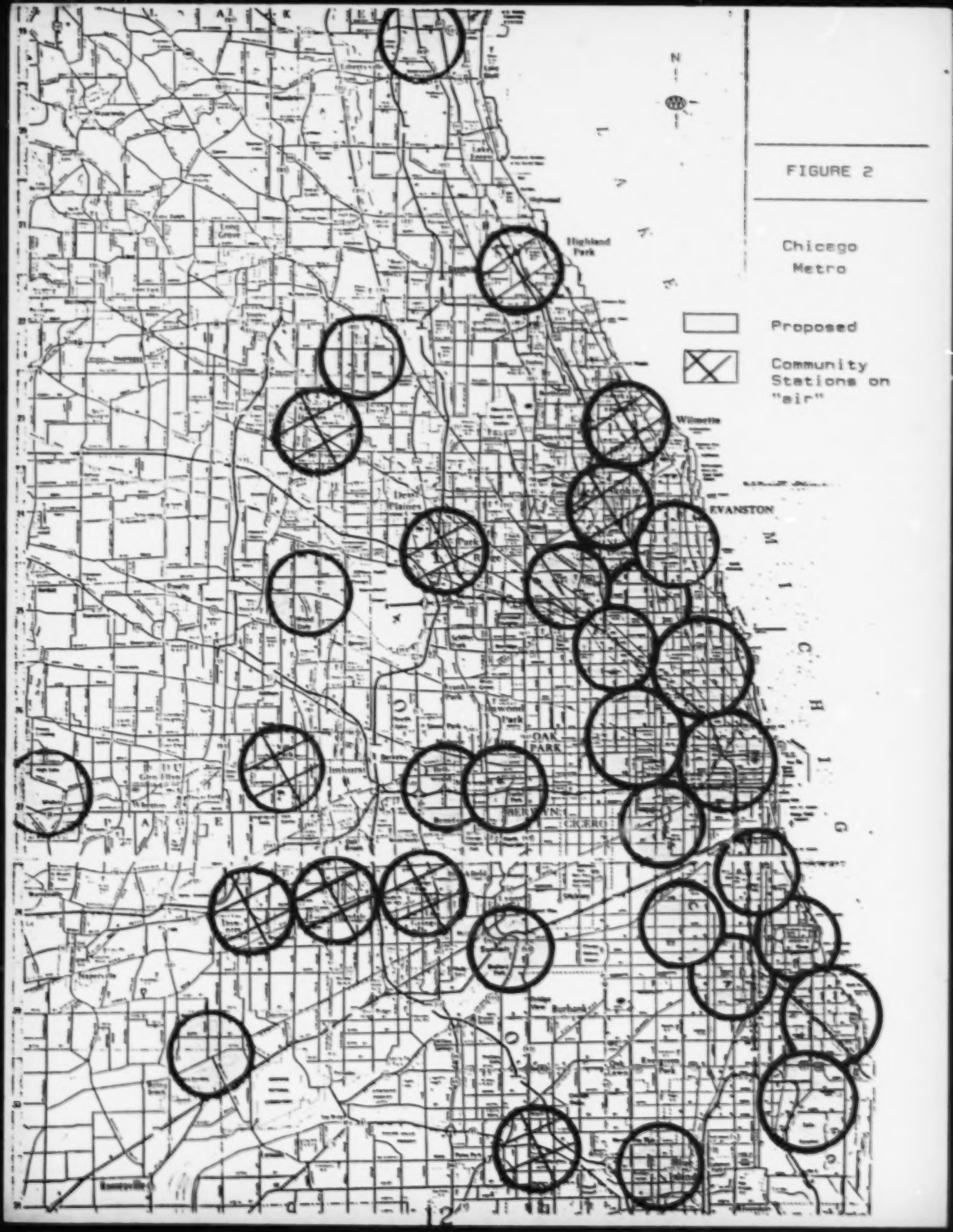
FIGURE 2
Chicago Metro
Proposed
Community Stations on "air"
Highland Park
Wilmette
EVANSTON
OAK PARK
CICERO
Elmhurst
Naperville